

DRAFT Need to Know criteria for Wastewater Treatment Operator License Exams

Wastewater Treatment Level B Curriculum

The following items are reference materials for the Wastewater Treatment Level B examination – in addition to the following a person should understand the Wastewater Treatment Level D and Wastewater Treatment Level C reference materials plus the following:

Operation of Wastewater Treatment Plants, Volume II, Seventh Edition - Office of Water Programs, California State University, Sacramento

Chap 11 – Activated Sludge, Lesson 4, 5, 6 & 7
Chap 12 – Sludge Digestion and Solids Handling, Lessons 2, 3 & 4
Chap 15 – Maintenance, Lesson 4, 5 & 6
Chap 16 – Laboratory Procedures and Chemistry, Lessons 5 & 6
Chap 20 – Treatment Plant Administration

Advanced Waste Treatment, Fifth Edition - Office of Water Programs, California State University, Sacramento

Chap 1 – Odor Control
Chap 3 – Solids Management, Lesson 1, 2 & 4
Chap 5 – Phosphorus Removal
Chap 6 – Nitrogen Removal

The following items are subjects and skills a person should know and understand before taking the Wastewater Level B examination – Need to know all Wastewater Treatment Level D and Wastewater Treatment Level C NTK plus the following:

1. Regulations
 - a. State and Federal regulations for:
 - i. Prohibited Discharge
 - b. Standard Methods for Examination of Water and Wastewater
2. Biology
 - a. Types of Bacteria in the Activated Sludge and Digester processes
 - b. Types of microorganisms in the Secondary Treatment processes
3. Chemistry
 - a. Gases and compounds found in waste treatment
4. Activated Sludge
 - a. Process operation
 - b. Identification
 - c. Observation
5. Mathematics
 - a. Hydraulic loading
 - b. SVI
 - c. F/M ratio
 - d. Sludge Age
 - e. Open channel flow calculations
6. Treatment Plant Operation
 - a. Odor control
 - b. Phosphorus removal
 - c. Nitrogen removal